Journal of Ecology 2002
90, 1071–1075

Index

ESSAY REVIEWS

Freckleton, R.P. & Watkinson, A.R. Large-scale spatial dynamics of plants: metapopulations, regional ensembles and patchy populations, 419

STANDAND PAPERS

Aerts, R. *see* **Hoorens, B.**
Aiba, S.-I. *see* **Kitayama, K.**
Alpert, P. *see* **Kolb, A.**
Álvarez-Buylla, E. *see* **Sánchez-Velásquez, L.R.**
Arenas, F., Viejo, R.M. & Fernández, C. Density-dependent regulation in an invasive seaweed: responses at plant and modular levels, 820

Ballaré, C.L. *see* **Searles, P.S.**
Bayman, P., González, E.J., Fumero, J.J. & Tremblay, R.L. Are fungi necessary? How fungicides affect growth and survival of the orchid *Lepanthes rupestris* in the field, 1002
Belyea, L.R. & Lancaster, J. Inferring landscape dynamics of bog pools from scaling relationships and spatial patterns, 223
Bernards, M.A. *see* **Qaderi, M.M.**
Besse, M. *see* **Kooijman, A.M.**
Bigelow, S.W. & Canham, C.D. Community organization of tree species along soil gradients in a north-eastern USA forest, 188
Bill, C.J. *see* **Harcombe, P.A.**
Boudry, P., McCombie, H. & van Dijk, H. Vernalization requirement of wild beet *Beta vulgaris* ssp. *maritima*: among population variation and its adaptive significance, 693
Brang, P. *see* **Cherubini, P.**
Bret-Harte, M.S., Shaver, G.R. & Chapin III, F.S. Primary and secondary stem growth in arctic shrubs: implications for community response to environmental change, 251
Bruna, E.M., Nardy, O., Strauss, S.Y. & Harrison, S. Experimental assessment of *Heliconia acuminata* growth in a fragmented Amazonian landscape, 639
Brussaard, L. *see* **Verschoor, B.C.**
Bubier, J.L. *see* **Moore, T.R.**
Burdick, D.M. *see* **Seliskar, D.M.**
Burdon, J.J. *see* **Ericson, L.**
Buttler, A. *see* **Mitchell, E.A.D.**

Cain, M.L. *see* **Higgins, S.I.**
Caldwell, M.M. *see* **Searles, P.S.**
Calviño-Cancela, M. Spatial patterns of seed dispersal and seedling recruitment in *Corema album* (Empetraceae): the importance of unspecialized dispersers for regeneration, 775
Canham, C.D. *see* **Bigelow, S.W.**
Cavers, P.B. *see* **Qaderi, M.M.**
Cerdá, X. *see* **Garrido, J.L.**
Chapin III, F.S. *see* **Bret-Harte, M.S.**
Cherubini, P., Fontana, G., Rigling, D., Dobbertin, M., Brang, P. & Innes, J.L. Tree-life history prior to death: two fungal root pathogens affect tree-ring growth differently, 839
Clark, J.S. *see* **Wyckoff, P.H.**
Clarke, P.J. & Kerrigan, R.A. The effects of seed predators on the recruitment of mangroves, 728
Cleavitt, N.L. Stress tolerance of rare and common moss species in relation to their occupied environments and asexual dispersal potential, 785
Cronberg, N. Colonization dynamics of the clonal moss *Hylocomium splendens* on islands in a Baltic land uplift area: reproduction, genet distribution and genetic variation, 925
Cuevas, J.G. Episodic regeneration at the *Nothofagus pumilio* alpine timberline in Tierra del Fuego, Chile, 52

Dalling, J.W. & Hubbell, S.P. Seed size, growth rate and gap microsite conditions as determinants of recruitment success for pioneer species, 557
Dalling, J.W., Muller-Landau, H.C., Wright, S.J. & Hubbell, S.P. Role of dispersal in the recruitment limitation of neotropical pioneer species, 714
Damgaard, C. Weiner, J. & Nagashima, H. Modelling individual growth and competition in plant populations: growth curves of *Chenopodium album* at two densities, 666
Davis, M.A., Pritchard, S.G., Mitchell, R.J., Prior, S.A., Rogers, H.H. & Runion, G.B. Elevated atmospheric CO_2 affects structure of a model regenerating longleaf pine community, 130
Denison, J. *see* **Helgason, T.**
Díaz, S.B. *see* **Searles, P.S.**
Diekmann, M. & Falkengren-Grerup, U. Prediction of species response to atmospheric nitrogen deposition by means of ecological measures and life history traits, 108
van Dijk, H. *see* **Boudry, P.**
van Dijk, H. *see* **Hautekèete, N.-C.**
Dobbertin, M. *see* **Cherubini, P.**
Dumayne-Peaty, L. *see* **Hughes, P.D.M.**
Dupré, C. & Ehrlén, J. Habitat configuration, species traits and plant distributions, 796
Duyts, H. *see* **van der Stoel, C.D.**

Eaton, J.W. *see* **Jones, J.I.**
Ehrlén, J. *see* **Dupré, C.**
Elsik, I.S. *see* **Harcombe, P.A.**
Enright, N.J. *see* **Groeneveld, J.**
Enters, D. *see* **Kolb, A.**
Ericson, L. *see* **Strengbom, J.**

© 2002 British Ecological Society

Ericson, L., Burdon, J.J. & Müller, W.J. The rust pathogen *Triphragmium ulmariae* as a selective force affecting its host, *Filipendula ulmaria*, 167
Ezcurra, E. *see* **Sánchez-Velásquez, L.R.**

Falkengren-Grerup, U. *see* **Diekmann, M.**
Fernández, C. *see* **Arenas, F.**
Figuerola, J., Green, A.J. & Santamaría, I. Comparative dispersal effectiveness of wigeongrass seeds by waterfowl wintering in south-west Spain: quantitative and qualitative aspects, 989
Fitter, A.H. *see* **Helgason, T.**
Flint, S.D. *see* **Searles, P.S.**
Fontana, G. *see* **Cherubini, P.**
Fragoso, J.M.V. *see* **Silvius, K.M.**
Freckleton, R.P. & Watkinson, A.R. Large-scale spatial dynamics of plants: metapopulations, regional ensembles and patchy populations, 419
Frolking, S.E. *see* **Moore, T.R.**
Fulton, M. *see* **Harcombe, P.A.**
Fumero, J.J. *see* **Bayman, P.**

Gallagher, J.L. *see* **Seliskar, D.M.**
Galloway, L.F. The effect of maternal phenology on offspring characters in the herbaceous plant *Campanula americana*, 851
Garrido, J.L., Rey, P.J. Cerdá, X. & Herrera, C.M. Geographical variation in diaspore traits of an ant-dispersed plant (*Helleborus foetidus*): are ant community composition and diaspore traits correlated? 446
Gervais, B.R., MacDonald, G.M., Snyder, J.A. & Kremenetski, C.V. *Pinus sylvestris* treeline development and movement on the Kola Peninsula of Russia: pollen and stomate evidence, 627
Glitzenstein, J.S. *see* **Harcombe, P.A.**
Gobat, J.-M. *see* **Mitchell, E.A.D.**
de Goede, R.G.M. *see* **Verschoor, B.C.**
González, E.J. *see* **Bayman, P.**
Grace, J.B. *see* **Jutila, H.M.**
Green, A.J. *see* **Figuerola, J.**
Groeneveld, J., Enright, N.J., Lamont, B.B. & Wissel, C. A spatial model of coexistence among three *Banksia* species along a topographic gradient in fire-prone shrublands, 762
Grosvernier, P. *see* **Mitchell, E.A.D.**
Gunnarsson, U. *see* **Sjörs, H.**
Guo, D., Mou, P., Jones, R.H. & Mitchell, R.J. Temporal changes in spatial patterns of soil moisture following disturbance: an experimental approach, 338
Gutsell, S.L. & Johnson, E.A. Accurately ageing trees and examining their height-growth rates: implications for interpreting forest dynamics, 153

Handa, I.T., Harmsen, R. & Jefferies, R.L. Patterns of vegetation change and the recovery potential of degraded areas in a coastal marsh system of the Hudson Bay lowlands, 86
Harcombe, P.A., Bill, C.J., Fulton, M., Glitzenstein, J.S., Marks, P.L. & Elsik, I.S. Stand dynamics over 18 years in a southern mixed hardwood forest, Texas, USA, 947
Harmsen, R. *see* **Handa, I.T.**
Harrison, S. *see* **Bruna, E.M.**
Hartley, S.E. *see* **Richardson, S.J.**
Hautekèete, N.-C., Piquot, Y. & van Dijk, H. Life span in *Beta vulgaris* ssp. *maritima*: the effects of age at first reproduction and disturbance, 508
Heil, G.W. *see* **Soons, M.B.**
Helgason, T., Merryweather, J.W., Denison, J., Wilson, P., Young, J.P.W. & Fitter, A.H. Selectivity and functional diversity in arbuscular mycorrhizas of co-occurring fungi and plants from a temperate deciduous woodland, 371
Herrera, C.M. *see* **Garrido, J.L.**
Higgins, S.I. & Cain, M.L. Spatially realistic plant metapopulation models and the colonization–competition trade-off, 616
Hik, D.S. *see* **Mcintire, E.J.B.**
Holl, K.D. Effect of shrubs on tree seedling establishment in an abandoned tropical pasture, 179
Holzapfel, C. *see* **Kolb, A.**
Hoorens, B., Aerts, R. & Stroetenga, M. Litter quality and interactive effects in litter mixtures: more negative interactions under elevated CO_2? 1009
Horvitz, C.C. & Schemske, D.W. Effects of plant size, leaf herbivory, local competition and fruit production on survival, growth and future reproduction of a neotropical herb, 279
Hubbell, S.P. *see* **Dalling, J.W.**
Hughes, P.D.M. & Dumayne-Peaty, L. Testing theories of mire development using multiple successions at Crymlyn Bog, west Glamorgan, South Wales, UK, 456

Innes, J.L. *see* **Cherubini, P.**
Iwasa, Y. *see* **Satake, A.**

Jackson, R.B. *see* **Schenk, H.J.**
Jacobson Jr, G.L. *see* **Schauffler, M.**
Jefferies, R.L. *see* **Handa, I.T.**
John, E. *see* **Turkington, R.**
Johnson, E.A. *see* **Gutsell, S.L.**
Jones, J.I., Young, J.O., Eaton, J.W. & Moss, B. The influence of nutrient loading, dissolved inorganic carbon and higher trophic levels on the interaction between submerged plants and periphyton, 12
Jones, R.H. *see* **Guo, D.**
Jutila, H.M. & Grace, J.B. Effects of disturbance on germination and seedling establishment in a coastal prairie grassland: a test of the competitive release hypothesis, 291

Kerrigan, R.A. *see* **Clarke, P.J.**
Kéry, M. *see* **Luijten, S.H.**
Kigel, J. *see* **Osem, Y.**
Kitayama, K. & Aiba, S.-I. Ecosystem structure and productivity of tropical rain forests along altitudinal gradients with contrasting soil phosphorus pools on Mount Kinabalu, Borneo, 37

© 2002 British Ecological Society,

Kleijn, D. & Steinger, T. Contrasting effects of grazing and hay cutting on the spatial and genetic population structure of *Veratrum album*, an unpalatable, long-lived, clonal plant species, 360

Kolb, A., Alpert, P., Enters, D. & Holzapfel, C. Patterns of invasion within a grassland community, 871

Kooijman, A.M. & Besse, M. The higher availability of N and P in lime-poor than in lime-rich coastal dunes in the Netherlands, 394

Kremenetski, C.V. *see* **Gervais, B.R.**

Kulakowski, D. & Veblen, T.T. Influences of fire history and topography on the pattern of a severe wind blowdown in a Colorado subalpine forest, 806

Kullman L. Rapid recent range-margin rise of tree and shrub species in the Swedish Scandes, 68

Lafleur, P.M. *see* **Moore, T.R.**

Lamont, B.B. *see* **Groeneveld, J.**

Lancaster, J. *see* **Belyea, L.R.**

Landhäusser, S.M. & Lieffers, V.J. Leaf area renewal, root retention and carbohydrate reserves in a clonal tree species following above-ground disturbance, 658

Law, R. *see* **Purves, D.W.**

Lieffers, V.J. *see* **Landhäusser, S.M.**

Lorente, R. *see* **Sánchez-Velásquez, L.R.**

Lortie, C.J. & Turkington, R. The effect of initial seed density on the structure of a desert annual plant community, 435

Luijten, S.H., Kéry, M., Oostermeijer, J.G.B. & den Nijs, H.(J.)C.M. Demographic consequences of inbreeding and outbreeding in *Arnica montana*: a field experiment, 593

MacDonald, G.M. *see* **Gervais, B.R.**

Marks, P.L. *see* **Harcombe, P.A.**

Martínez-Ramos, M. *see* **Sánchez-Velásquez, L.R.**

McCombie, H. *see* **Boudry, P.**

McIntire, E.J.B. & Hik, D.S. Grazing history versus current grazing: leaf demography and compensatory growth of three alpine plants in response to a native herbivore (*Ochotona collaris*), 348

Merryweather, J.W. *see* **Helgason, T.**

Mitchell, E.A.D., Buttler, A., Grosvernier, P., Rydin, H., Siegenthaler, A. & Gobat, J.-M. Contrasted effects of increased N and CO_2 supply on two keystone species in peatland restoration and implications for global change, 529

Mitchell, R.J. *see* **Davis, M.A.**

Mitchell, R.J. *see* **Guo, D.**

Moore, T.R., Bubier, J.L., Frolking, S.E., Lafleur, P.M. & Roulet, N.T. Plant biomass and production and CO_2 exchange in an ombrotrophic bog, 25

Moss, B. *see* **Jones, J.I.**

Motta, R., Nola, P. & Piussi, P. Long-term investigations in a strict forest reserve in the eastern Italian Alps: spatio-temporal origin and development in two multi-layered subalpine stands, 495

Mou, P. *see* **Guo, D.**

Müller, W.J. *see* **Ericson, L.**

Muller-Landau, H.C. *see* **Dalling, J.W.**

Murren, C.J. Effects of habitat fragmentation on pollination: pollinators, pollinia viability and reproductive success, 100

Mutz, L.A. *see* **Seliskar, D.M.**

Nagashima, H. *see* **Damgaard, C.**

Nakamura, T., Uemura, S. & Yabe, K. Hydrochemical regime of fen and bog in north Japanese mires as an influence on habitat and above-ground biomass of *Carex* species, 1017

Nardy, O. *see* **Bruna, E.M.**

Näsholm, T. *see* **Strengbom, J.**

den Nijs, H.(J.)C.M. *see* **Luijten, S.H.**

Nishiwaki, A. *see* **Saitoh, T.**

Nola, P. *see* **Motta, R.**

Nordin, A. *see* **Strengbom, J.**

Oliveira, P.S. *see* **Passos, L.**

Oostermeijer, J.G.B. *see* **Luijten, S.H.**

Osem, Y., Perevolotsky, A. & Kigel, J. Grazing effect on diversity of annual plant communities in a semi-arid rangeland: interactions with small-scale spatial and temporal variation in primary pro-ductivity, 936

Parsons, A.N. *see* **Richardson, S.J.**

Passos, L. & Oliveira, P.S. Ants affect the distribution and performance of seedlings of *Clusia criuva*, a primarily bird-dispersed rain forest tree, 517

Perevolotsky, A. *see* **Osem, Y.**

Pilon, J. & Santamaría, L. Clonal variation in the thermal response of the submerged aquatic macrophyte *Potamogeton pectinatus*, 141

Pilon, J. & Santamaría, L. Clonal variation in morphological and physiological responses to irradiance and photoperiod for the aquatic angiosperm *Potamogeton pectinatus*, 859

Piquot, Y. *see* **Hautekèete, N.-C.**

Piussi, P. *see* **Motta, R.**

Press, M.C. *see* **Richardson, S.J.**

Prior, S.A. *see* **Davis, M.A.**

Pritchard, S.G. *see* **Davis, M.A.**

Pronk, T.E. *see* **Verschoor, B.C.**

Purves, D.W. & Law, R. Fine-scale spatial structure in a grassland community: quantifying the plant's-eye view, 121

Purves, D.W. & Law, R. Experimental derivation of functions relating growth of *Arabidopsis thaliana* to neighbour size and distance, 882

van der Putten, W.H. *see* **van der Stoel, C.D.**

Qaderi, M.M., Cavers, P.B. & Bernards, M.A. Seed bank dynamics of *Onopordum acanthium*: emergence patterns and chemical attributes, 672

Rajaniemi, T.K. Why does fertilization reduce plant species diversity? Testing three competition-based hypotheses, 316

Reich, P.B. *see* **Wright, I.J.**

© 2002 British Ecological Society,

Remold, S.K. Unapparent virus infection and host fitness in three weedy grass species, 967
Rey, P.J. *see* **Garrido, J.L.**
Richardson, S.J., Press, M.C., Parsons, A.N. & Hartley, S.E. How do nutrients and warming impact on plant communities and their insect herbivores? A 9-year study from a sub-Arctic heath, 544
Rigling, D. *see* **Cherubini, P.**
Rodríguez-Gironés, M.A. *see* **Santamaría, L.**
Rogers, H.H. *see* **Davis, M.A.**
Roulet, N.T. *see* **Moore, T.R.**
Rousseaux, M.C. *see* **Searles, P.S.**
Ruiz, N., Ward, D. & Saltz, D. Responses of *Pancratium sickenbergeri* to simulated bulb herbivory: combining defence and tolerance strategies, 472
Runion, G.B. *see* **Davis, M.A.**
Rydin, H. *see* **Mitchell, E.A.D.**
Rydin, H. *see* **Sundberg, S.**

Saitoh, T., Seiwa, K. & Nishiwaki, A. Importance of physiological integration of dwarf bamboo to persistence in forest understorey: a field experiment, 78
Saltz, D. *see* **Ruiz, N.**
Sánchez-Velásquez, L.R., Ezcurra, E., Martínez-Ramos, M., Álvarez-Buylla, E. & Lorente, R. Population dynamics of *Zea diploperennis*, an endangered perennial herb: effect of slash and burn practice, 684
Santamaría, I. *see* **Figuerola, J.**
Santamaría, L. *see* **Pilon, J.**
Santamaría, L. & Rodríguez-Gironés, M.A. Hiding from swans: optimal burial depth of sago pondweed tubers foraged by Bewick's swans, 303
Satake, A. & Iwasa, Y. The synchronized and intermittent reproduction of forest trees is mediated by the Moran effect, only in association with pollen coupling, 830
Schauffler, M. & Jacobson Jr, G.L. Persistence of coastal spruce refugia during the Holocene in northern New England, USA, detected by stand-scale pollen stratigraphies, 235
Schemske, D.W. *see* **Horvitz, C.C.**
Schenk, H.J. & Jackson, R.B. Rooting depths, lateral root spreads and below-ground/above-ground allometries of plants in water-limited ecosystems, 480
Searles, P.S., Flint, S.D., Díaz, S.B., Rousseaux, M.C., Ballaré, C.L. & Caldwell, M.M. Plant response to solar ultraviolet-B radiation in a southern South American *Sphagnum* peatland, 704
Seccombe-Hett, P. *see* **Turkington, R.**
Seiwa, K. *see* **Saitoh, T.**
Seliskar, D.M., Gallagher, J.L., Burdick, D.M. & Mutz, L.A. The regulation of ecosystem functions by ecotypic variation in the dominant plant: a *Spartina alterniflora* salt-marsh case study, 1
Shaver, G.R. *see* **Bret-Harte, M.S.**
Siegenthaler, A. *see* **Mitchell, E.A.D.**
Silvertown, J. *see* **Tofts, R.**
Silvius, K.M. & Fragoso, J.M.V. Pulp handling by vertebrate seed dispersers increases palm seed predation by bruchid beetles in the northern Amazon, 1024
Sjörs, H. & Gunnarsson, U. Calcium and pH in north and central Swedish mire waters, 650
Sletvold, N. Effects of plant size on reproductive output and offspring performance in the facultative biennial *Digitalis purpurea*, 958
Snyder, J.A. *see* **Gervais, B.R.**
Soons, M.B. & Heil, G.W. Reduced colonization capacity in fragmented populations of wind-dispersed grassland forbs, 1033
Steinger, T. *see* **Kleijn, D.**
van der Stoel, C.D., van der Putten, W.H. & Duyts, H. Development of a negative plant–soil feedback in the expansion zone of the clonal grass *Ammophila arenaria* following root formation and nematode colonization, 978
Strauss, S.Y. *see* **Bruna, E.M.**
Strengbom, J., Nordin, A., Näsholm, T. & Ericson, L. Parasitic fungus mediates change in nitrogen-exposed boreal forest vegetation, 61
Stroetenga, M. *see* **Hoorens, B.**
Sundberg, S. & Rydin, H. Habitat requirements for establishment of *Sphagnum* from spores, 268

Tofts, R. & Silvertown, J. Community assembly from the local species pool: an experimental study using congeneric species pairs, 385
Tremblay, R.L. *see* **Bayman, P**
Turkington, R. *see* **Lortie, C.J.**
Turkington, R., John, E., Watson, S. & Seccombe-Hett, P. The effects of fertilization and herbivory on the herbaceous vegetation of the boreal forest in north-western Canada: a 10-year study, 325

Uemura, S. *see* **Nakamura, T.**

Veblen, T.T. *see* **Kulakowski, D.**
Verschoor, B.C., Pronk, T.E., de Goede, R.G.M. & Brussaard, L. Could plant-feeding nematodes affect the competition between grass species during succession in grasslands under restoration management? 753
Viejo, R.M. *see* **Arenas, F.**

Ward, D. *see* **Ruiz, N.**
Watkinson, A.R. *see* **Freckleton, R.P.**
Watson, S. *see* **Turkington, R.**
Webb, N.R. *see* **Hodkinson, I.D.**
Weiner, J. *see* **Damgaard, C.**
Westoby, M. *see* **Wright, I.J.**
Wilson, P. *see* **Helgason, T.**
Wissel, C. *see* **Groeneveld, J.**
Wright, I.J., Westoby, M. & Reich, P.B. Convergence towards higher leaf mass per area in dry and nutrient-poor habitats has different consequences for leaf life span, 534

© 2002 British Ecological Society,

Wright, S.J. *see* **Dalling, J.W.**
Wyckoff, P.H. & Clark, J.S. The relationship between growth and mortality for seven co-occurring tree species in the southern Appalachian Mountains, 604

Yabe, K. *see* **Nakamura, T.**
Young, J.O. *see* **Jones, J.I.**
Young, J.P.W. *see* **Helgason, T.**

FORUM PAPERS

Cahill Jr, J.F. What evidence is necessary in studies which separate root and shoot competition along productivity gradients? 201
Hodkinson, I.D., Webb, N.R. & Coulson, S.J. Primary community assembly on land – the missing stages: why are the heterotrophic organisms always there first? 569
Zobel, M. & Zobel, K. Studying plant competition: from root biomass to general aims, 578

BIBLOGICAL FLORA OF THE BRITISH ISLES

Atkinson, M.D. & Atkinson, E. *Sambucus nigra* L., 895
Carey, P.D. & Farrell, L. *Himantoglossum hircinum* (L.) Sprengel, 206
Dixon, J.M. *Briza media* L., 737
Kollmann, J. & Grubb, P.J. *Viburnum lantana* L. and *Viburnum opulus* L. (*V. lobatum* Lam., *Opulus vulgaris* Borkh.), 1044
Taylor, K., Havill, D.C., Pearson, J. & Woodall, J. *Trientalis europaea* L., 404
Wheeler, B.R. & Hutchings, M.J. *Phyteuma spicatum* L., 581

© 2002 British Ecological Society,